UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/737,064	12/16/2003	Raymond Hornback JR.	LOT920030076US1 (030)	5214
46321 7590 08/27/2007 CAREY, RODRIGUEZ, GREENBERG & PAUL, LLP STEVEN M. GREENBERG			EXAMINER	
			PERUNGAVOOR, SATHYANARAYA V	
950 PENINSUI SUITE 3020	950 PENINSULA CORPORATE CIRCLE SUITE 3020		ART UNIT	PAPER NUMBER
BOCA RATON, FL 33487			2624	
		MAIL DATE	DELIVERY MODE	
			08/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/737,064	HORNBACK ET AL.			
Office Action Summary	Examiner	Art Unit			
	Sath V. Perungavoor	2624			
The MAILING DATE of this communication ap	ppears on the cover sheet with	the correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPI WHICHEVER IS LONGER, FROM THE MAILING [ - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the maili earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICA .136(a). In no event, however, may a reply d will apply and will expire SIX (6) MONTH te, cause the application to become ABAN	TION. y be timely filed S from the mailing date of this communication. DONED (35 U.S.C. § 133).			
Status	•				
1) Responsive to communication(s) filed on 30.	July 2007.				
· <u>=</u>	, <del></del>				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 1	1, 453 O.G. 213.			
Disposition of Claims					
4)  Claim(s) 1-8 and 10-14 is/are pending in the star 4a) Of the above claim(s) is/are withdra 5)  Claim(s) is/are allowed.  6)  Claim(s) 1-8 and 10-14 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/	awn from consideration.				
Application Papers					
9) The specification is objected to by the Examin 10) The drawing(s) filed on is/are: a) ac Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	cepted or b) objected to by e drawing(s) be held in abeyance ction is required if the drawing(s)	s. See 37 CFR 1.85(a). is objected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of:  1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the pri application from the International Burea * See the attached detailed Office action for a list	nts have been received. nts have been received in App ority documents have been re au (PCT Rule 17.2(a)).	elication No eceived in this National Stage			
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/N	nmary (PTO-413) Mail Date rmal Patent Application			

Art Unit: 2624

#### **DETAILED ACTION**

### Applicant(s) Response to Official Action

[1] The response filed on July 30, 2007 has been entered and made of record.

#### Response to Arguments/Amendments

[2] Presented arguments have been fully considered, but are rendered moot in view of the new ground(s) of rejection necessitated by amendment(s) initiated by the applicant(s).

## Claim Objections

- [3] Claims 10-14 are objected to because of the following informalities:
  - Claims are depend on cancelled claim 9.

Appropriate correction is required.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2624

Page 3

[4] Claims 1-4, 8 and 10-12 are rejected under 35 U.S.C. 102(e) as being anticipated by

Roylancei.

Ĩ

Regarding claim 1, Roylance meets the claim limitations, as follows:

A componentized application sharing system (i.e. 100) configured for use with a shared application host, the system comprising: a plurality of different pluggable image processing modules (i.e. 206 and 306), each of said different pluggable image processing modules (i.e. 206 and 306) conforming to a corresponding single interface (i.e. network) expected by the application sharing module (i.e. 108) [figs. 1-3; paras. 0020 and 0029], each of said different pluggable image processing modules being selectable to meet requirements of a shared application hosted in the shared application host [para. 0035]; and, a communicative coupling (i.e. network) between the application sharing module (i.e. 108) and a selected one of said different image processing modules (i.e. 206 and 306) [figs. 1-3; para. 0020].

Regarding claim 2, Roylance meets the claim limitations, as follows:

The system of claim 1, wherein said pluggable image processing modules comprises a plurality of different pluggable image compression modules [para. 0029].

Regarding claim 3, Roylance meets the claim limitations, as follows:

The system of claim 1, wherein said pluggable image processing modules comprises a plurality of different pluggable image capturing modules [para. 0021: scanner and camera].

Regarding claim 4, Roylance meets the claim limitations, as follows:

The system of claim 1, wherein said pluggable image processing modules comprises a plurality of different pluggable image transmission modules [paras. 0018 and 0021: printer and scanner with fax].

Regarding claim 8, Roylance meets the claim limitations, as set forth in the discussion for claim 1 and further discloses the application sharing host comprising selection logic programmed to select an application sharing strategy ranging from high image fidelity to high speed image transmission [para. 0029: Any selecting method would fall within this range].

Regarding claims 10-12, all claimed limitations are set forth and rejected as per discussion for claims 1-4.

[5] Claims 1, 2, 7, 8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated De Queiroz<sup>ii</sup>

Regarding claim 1, De Queiroz meets the claim limitations, as follows:

A componentized application sharing system [fig. 2] configured for use with a shared application host, the system comprising: a plurality of different pluggable image processing modules (i.e. M1-M4), each of said different pluggable image processing modules (i.e. M1-M4) conforming to a corresponding single interface (i.e. 122) expected by the application sharing module [fig. 2; para. 0043], each of said different pluggable image processing modules being selectable to meet requirements of a

Art Unit: 2624

Page 5

shared application hosted (i.e. 104) in the shared application host [para. 0043]; and, a

communicative coupling (i.e. system bus) between the application sharing module and a

selected one of said different image processing modules [fig. 1 and 2].

Regarding claim 2, De Queiroz meets the claim limitations, as follows:

The system of claim 1, wherein said pluggable image processing modules comprises a

plurality of different pluggable image compression modules (i.e. M1-M4) [fig. 2; para.

0042].

Regarding claim 7, De Queiroz meets the claim limitations, as follows:

The system of claim 2, wherein said different image compression modules (i.e. M1-

M4) comprise image compression logic (i.e. 104) programmed to produce one of a

smallest possible image size to provide a highest possible rate of transmission for a

compressed image (i.e. M4), a lowest level of image resolution loss to provide a

highest level of image fidelity for a compressed image (i.e. M1), and a moderate image

size (i.e. M2 or M3) to provide an intermediate rate of transmission and an

intermediate level of image fidelity for a compressed image [paras. 0042 and 0043].

Regarding claims 8 and 10, all claimed limitations are set forth and rejected as per discussion

for claims 1, 2 and 7.

Claim Rejections - 35 USC § 103

Art Unit: 2624

Page 6

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- [6] Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Queiroz in view of Shen et al. ("Shen").

Regarding claim 6, De Queiroz meets the claim limitations as disclosed in claim 1.

De Queiroz does not explicitly disclose the following claim limitations:

The system of claim 1, wherein said pluggable image processing modules comprises a plurality of different pluggable image region selection modules configured to process selected image sub-partitions of shared application imagery, each of said different pluggable image region selection modules selecting and ordering processing of said selected image sub-partitions differently.

However, in the same field of endeavor Shen discloses the deficient claim limitations, as follows:

A plurality of different pluggable image region selection (i.e. 6, 7 and 8) modules configured to process selected image sub-partitions (i.e. sub-bands) of shared application imagery, each of said different pluggable image region selection modules (i.e. 6, 7 and 8) selecting and ordering processing (i.e. scan path) of said selected image sub-partitions differently (i.e. horizontal, vertical or zig-zag) [figs. 5 and 7].

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teachings of De Queiroz with Shen to use different scanning directions based on sub-bands, the motivation being to use less bits [col. 2, ll. 29-40].

Regarding claim 14, all claimed limitations are set forth and rejected as per discussion for claim 6.

[7] Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable Roylance over in view of Shen.

Regarding claim 6, Roylance meets the claim limitations as disclosed in claim 1.

Roylance does not explicitly disclose the following claim limitations:

The system of claim 1, wherein said pluggable image processing modules comprises a plurality of different pluggable image region selection modules configured to process selected image sub-partitions of shared application imagery, each of said different pluggable image region selection modules selecting and ordering processing of said selected image sub-partitions differently.

However, in the same field of endeavor Shen discloses the deficient claim limitations, as follows:

A plurality of different pluggable image region selection (i.e. 6, 7 and 8) modules configured to process selected image sub-partitions (i.e. sub-bands) of shared application imagery, each of said different pluggable image region selection modules

(i.e. 6, 7 and 8) selecting and ordering processing (i.e. scan path) of said selected image sub-partitions differently (i.e. horizontal, vertical or zig-zag) [figs. 5 and 7].

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teachings of Roylance with Shen to use different scanning directions based on sub-bands, the motivation being to use less bits [col. 2, ll. 29-40].

Regarding claim 14, all claimed limitations are set forth and rejected as per discussion for claim 6.

[8] Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable Roylance over in view of Jang et al. ("Jang").

Regarding claim 5, Roylance meets the claim limitations as disclosed in claim 1.

Roylance does not explicitly disclose the following claim limitations:

The system of claim 1, wherein said pluggable image processing modules comprises a plurality of different pluggable image change detection modules configured to trigger image updates responsive to changes in portions of a shared application image.

However, in the same field of endeavor Jang discloses the deficient claim limitations, as follows:

A plurality of different pluggable image change detection (i.e. scene change) modules (i.e. 1.1, 1.2 and 1.3) configured to trigger image updates responsive to changes in portions of a shared application image [page 841, col. 1, paras. 2 and 3; Sections 1.1, 1.2 and 1.3].

Art Unit: 2624

Page 9

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teachings of Roylance with Jang to select among the different scene change algorithms, the motivation being that each algorithm as a trade off between speed and accuracy [page 842, col. 1, paras. 1 and 2; page 842, col. 2, para. 2].

Regarding claim 13, all claimed limitations are set forth and rejected as per discussion for claim 5.

[9] Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable De Queiroz over in view of Jang.

Regarding claim 5, De Queiroz meets the claim limitations as disclosed in claim 1.

De Queiroz does not explicitly disclose the following claim limitations:

The system of claim 1, wherein said pluggable image processing modules comprises a plurality of different pluggable image change detection modules configured to trigger image updates responsive to changes in portions of a shared application image.

However, in the same field of endeavor Jang discloses the deficient claim limitations, as follows:

A plurality of different pluggable image change detection (i.e. scene change) modules (i.e. 1.1, 1.2 and 1.3) configured to trigger image updates responsive to changes in portions of a shared application image [page 841, col. 1, paras. 2 and 3; Sections 1.1, 1.2 and 1.3].

Art Unit: 2624

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teachings of De Queiroz with Jang to select among the different scene change algorithms, the motivation being that each algorithm as a trade off between speed and accuracy [page 842, col. 1, paras. 1 and 2; page 842, col. 2, para. 2].

Regarding claim 13, all claimed limitations are set forth and rejected as per discussion for claim 5.

#### Conclusion

[10] Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2624

**Contact Information** 

[11] Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Mr. Sath V. Perungavoor whose telephone number is (571) 272-7455. The

examiner can normally be reached on Monday to Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Mr. Matthew C. Bella whose telephone number is (571) 272-7778, can be reached on Monday to

Friday from 9:00am to 5:00pm. The fax phone number for the organization where this application

or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system,

see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system,

contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dated: August 20, 2007

Matthew C. Bella Sath V. Perungavoor

Telephone: (571) 272-7455

MATTHEW C. BELLA SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600

i US 2003/0007703 A1

<sup>&</sup>quot; US 2001/0041017 A1

iii US 6,055,017

iv NPL document titled, "Performance Evaluation of Scene Change Detection Algorithms"